

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CAULIFLOWER

'Snowflower'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington, DC
this 18th day of June in
the year of our Lord one thousand nine
hundred and seventy-six

Attest:

L. J. Rollins
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz
Secretary of Agriculture

XP 64

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY	
Snowflower	Cauliflower	PV NUMBER	7400051
3. GENUS AND SPECIES NAME	4. FAMILY NAME (Botanical)	FILING DATE	TIME
Brassica oleracea var. botrytis	Cruciferae	1-14-74	8:00 A.M.
	5. DATE OF DETERMINATION	FEE RECEIVED	BALANCE DUE
	December 1969	\$ 250	\$ —
		\$ 250	\$ —
		\$ 250	\$ —
6. NAME OF APPLICANT(S)	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	8. TELEPHONE AREA CODE AND NUMBER	
Asgrow Seed Company	Kalamazoo, Michigan 49001	(616) 382-4000	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)		10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation		Delaware	March 22, 1968

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Allen Trotter
Asgrow Seed Company
Kalamazoo, Michigan 49001

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Botanical Description of the Variety
- ☒ 13C. Exhibit C, Objective Description of the Variety
- ☒ 13D. Exhibit D, Data Indicative of Novelty
- ☒ 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☒ NO14C. If "Yes," to 14B, how many generations of production beyond breeder seed? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

January 11, 1974
(DATE)

Allen Trotter
(SIGNATURE OF APPLICANT)

1

(DATE)

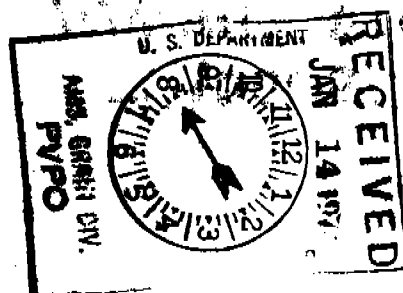
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.





Asgrow Seed Company

74-51

Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, receipt of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

By: Norman A. Braksik
Norman A. Braksik
President

EXHIBIT A

Origin and breeding history of the variety

Cauliflower: Snowflower

1. Snowflower originated from a single plant of the variety Snowball Y in 1967. The original selection was open pollinated with a number of other selected plants from the same variety.
2. This single plant selection was evaluated along with the other selections mentioned above in a commercial field in the Watsonville area of California in 1967 and also on the breeding grounds the same year. The selection which has been named Snowflower was the earliest maturing of the selections.

Seed increases have been made of Snowflower in 1968, 1969, 1971 and 1972 and was given the experimental designation XP 64 in 1969.

3. Variants have not been observed other than outcross contaminants in one or two of the seed increases. These are larger plants and show some characteristics of the contaminant plant.
4. Stability of the variety is indicated through the four increases mentioned above. No indications of genetic shift, change or break-down have been observed in trial plantings of the various increases.

EXHIBIT B

Botanical description of the variety

Cauliflower: Snowflower

Snowflower is a Snowball type cauliflower belonging to the Early Alpha group, characterized by erect leaves and solid curd. It was developed in California and appears to be best adapted there although it has performed reasonably well in some other areas.

In California it is best adapted to late summer and early fall harvest. It is earlier than Snowball Y by as much as ten days and is about the same maturity as Snowball X. It is more uniform in maturity than Snowball Y.

Plants are about the same height as Snowball Y, averaging about 26 cms. The leaf number averages about 35. Main leaves are about 66 cms long and 27 cms wide with a ratio of 2:1. Leaves are straight margined with thin veins. Leaves are sessile and medium green in color.

The curd averages about 16 cms in diameter and is about 09 cms deep, with a ratio of 2:1 diameter/depth. The curd is quite tight, dome shaped and smooth. It is bright white in color and is free from ricyness and bracts in the heads.

It is not known to have resistance to any particular disease.

Snowflower is comparable to Snowball Y in most characteristics except maturity in which it most closely resembles Snowball X. Leaves are more erect than in Snowball Y and the curd is better protected than is true of the parental variety.

CAULIFLOWER APPLICATION NO. 7400051, 'SNOWFLOWER'

AMENDMENT TO SNOWFLOWER PVP STATEMENT 13-D

Variety	Days to Maturity		Jacket leaf Length mm
	Direct Seed	Transplant	
Snowflower	109	81	635
Snowball 11	106	72	571
Monarch 73	106	72	571
Snowball X	110	82	600
Snowball Y	114	85	608

Snowflower is generally of Snowball Y type, but differs from that variety in being 4-5 days earlier in maturity.

Snowflower is 3-7 days later in maturity than Monarch 73 or Snowball 11.

Snowflower is of Snowball Y type, but is in Snowball X season. The longer jacket leaves of Snowflower afford better head protection than those of Snowball X.

Commercially, Snowball X and Snowball Y are recognized as distinct varieties on the basis of days to harvest and concentration of maturity. Snowball X is used where concentration of maturity is not desired, while Snowball Y and Snowflower are used where concentration of maturity is of importance.

EXHIBIT E

Ownership

Cauliflower; Snowflower

This captioned variety was developed by Mr. Kenneth Bixby, an employee of Asgrow Seed Company. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by the employee while employed by Asgrow Seed Company were assigned to Asgrow Seed Company, with no rights of any kind retained by employee.

6. CURD:

7400051

☐

1 = TIGHT

2 = LOOSE

☐

SHAPE:

1 = FLAT

2 = SEMI-DOME

3 = DOME

☐

1 = SMOOTH

2 = KNOBBY

☐

COLOR: 1 = BRIGHT WHITE

2 = CREAMY, DULL WHITE

3 = PURPLE-GREEN

☐

1 = NO LEAVES IN CURD

2 = LEAVES IN CURD

7. DISEASE RESISTANCE: (0 = Not Tested; 1 = Susceptible, 2 = Resistant. Specify race if known)

☐

BLACK SPOT

☐

CLUBROOT

☐

PHYTOPHTHORA ROOT ROT

☐

WHITE BLISTER

☐

BLACK ROT

☐

BOTTOM ROT

☐

CERCOSPORELLA LEAF SPOT

☐

DOWNY MILDEW

☐

POWDERY MILDEW

☐

VERTICILLUM WILT

☐

BLACK LEG

☐

CAULIFLOWER MOSAIC

☐

RING SPOT

☐

TURNIP YELLOW MOSAIC

☐

YELLOWS

☐

WIRE STEM

☐

OTHER (Specify)

8. OTHER RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐

"BUTTONING"

☐

"BLINDNESS"

☐

"RICEYNESS"

☐

"WHIPTAIL"

☐

INSECT (Specify)

9. INDICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
MATURITY	Snowball X	PLANT COLOR	Snowball Y
ADAPTATION	Snowball Y	CURD SIZE	Snowball Y
PLANT HABIT	Snowball Y	CURD SHAPE	Snowball Y
PLANT SIZE	Snowball Y	CURD COLOR	Snowball Y

REFERENCE:

Nieuwhof, M. 1969. Cole Crops -- World Crop Series, Leonard Hill.

COMMENTS: